AMWG HBC ad hoc group meeting notes April 21, 2003, Phoenix

Attendees

See attachment 1.

Agenda

- 1 Continue discussion on how the various proposed projects can be combined / sequenced into a comprehensive strategy
 - ecosystem approach
 - pre- and post-TCD considerations
 - monitoring / research required to learn from experiments
 - tie actions and expectations to Recovery Goals
 - consider whether proposals are in / out of AMP
 - retain integrity of current 2003 2004 experimental design
- consider explanatory variables (TCD, turbidity, non-native control, hydrology, parasites)

Tuesday's agenda (4/22) -> (1) Review and agree on proposals, (2) Sequence, schedule and prioritize, (3) Create total proposal package

Minutes

Discussion about current monitoring -> need to consider likely impacts of TCD construction on ability of HBC to spawn / recruit and how that might affect current monitoring (to be able to identify changes). Hoopnet sets are currently used throughout the mainstem to sample native fish; electrofishing is used to sample non-native salmonids. Need to be able to identify the impacts of whatever actions are taken to improve conditions for the HBC.

Comparison table of pre- and post-TCD (What monitoring is required? Sufficient data on each affected resource?

Near term (pre-TCD)

- 1 Expand non-native control efforts to tributaries and continue / expand mainstem efforts (prerequisite to #3)
 - Tapeats, Shinomu, Bright Angel,
 - Continue mainstem electrofishing (post-2004)
 - Assess warm water non-native fish abundance
- 2 Get broodstock into captivity to be ready to effectively produce HBC
- A resolve genetics question (Willow Beach HBC v. taking additional YOY HBC) (prerequisite to #2 2005)
 - B Evaluate Willow Beach HBC genetics (prerequisite to #2C 2003)
 - C start producing HBC at Willow Beach for research purposes (2004)

- 3 Expand range of existing HBC population to other Grand Canyon tributaries
 - coordinate with tribal interests

_

- 4 Use dam operations to disadvantage non-native fish and assist native fish
 - continue winter fluctuations to constrain trout recruitment (post- 2004) (assess 2003 results to improve effectiveness of flow)
 - determine time of year when HBC leave the LCR for the mainstem (2004?) (need to assess backwater / near-shore fish abundance)
 - April-May passive discharge of LCR HBC larval fish
 - determine effect of potential warming on non-native fish
- 5 Develop TCD experimental operation plan (2003) (part of TCD NEPA compliance document)
- 6 Develop LCR / mainstem population estimates
- 7 Manage turbidity sufficient to stress non-native fish
 - evaluate feasibility
 - turbidity experiment (2003)
- 8 Address parasite impacts
 - pre-TCD assessment of infestation (threat assessment) (refer to Rebecca Cole presentation)
 - potential treatment of fish
- 9 Implement spill management prevention at Cameron Bridge

Draft Outline of Report to AMWG

Introduction

Charge to the ad hoc group

Status of HBC and cause for decline

Mention of other recovery-type programs in the Colorado Basin

Description of threats in Recovery Plan document

Broad strategy for improving conditions for the HBC

Specific options and actions to accomplish strategy (Gantt chart)

Implications to other resources from implementation

Appendix - List of proposals